UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/895,768	06/29/2001	Michael H. Chu	2207/11234	6925

7590 04/04/2006

KENYON & KENYON
333 W. San Carlos, Street, Suite 600
San Jose, CA 95110-2711

EXAMINER	
WANG, JIN CHENG	
ART UNIT	**PAPER NUMBER**
2628	

DATE MAILED: 04/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/895,768	CHU ET AL.	
	Examiner	Art Unit	
	Jin-Cheng Wang	2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 December 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14 and 19-29* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14 and 19-29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

The finality of the rejection of the last Office action dated on 4/22/2005 is withdrawn. Applicant's submission dated 7/22/2005 has been entered. Claims 1-2 have been amended. Claims 16-18 have been canceled. Claims 1-15, and 19-29 are pending in the present application.

Response to Arguments

Applicant's arguments filed 7/22/2005 and 12/19/2005 are moot in view of the new ground of rejection set forth in the present Office Action based on Demos U.S. Patent No. 5,852,565 (hereinafter Demos-565) in view of Adobe Dynamic Media Group, "A Digital Video Primer", pp. 1-31; June 2000 as applied to claim 1 above, and further in view of Demos U.S. Patent No. 6,442,203 (hereinafter Demos-203).

As addressed below, the Demos-565 reference teaches the claim limitations set forth in the independent claim 19. Moreover, the claim 1 is unpatentable over Demos U.S. Patent No. 5,852,565 (hereinafter Demos-565) in view of Adobe Dynamic Media Group, "A Digital Video Primer", pp. 1-31; June 2000 as applied to claim 1 above, and further in view of Demos U.S. Patent No. 6,442,203 (hereinafter Demos-203).

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-2, 3-11 and 12-15 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

For example, the base claim 1 recites the two "resizing each full frame to produce a plurality of frames that are antialiased." Resizing each full frame (a single full frame) does not produce a plurality of frames, as opposed to resizing a plurality of the full frames to produce a plurality of frames that are antialiased.

To comply with the "written description" requirement of 35 U.S.C. 112, first paragraph, an applicant must convey with reasonable clarity to those skilled in the art that, as of the filling date sought, he or she was in possession of the invention. The invention is, for purposes of the "written description" inquiry, whatever is now claimed. Vas-Cath, Inc. v. Mahurkar, 935 F.2d 1555, 1563-64, 19 USPQ2d 1111, 1117 (Fed. Cir. 1991). For purposes of written description, one shows "possession" by descriptive means such as words, structures, figures, diagrams, and formulas that fully set forth the claimed invention. Lockwood v. American Airlines, Inc., 107 F.3d 1565, 1572, 41 USPQ2d 1961, 1966 (Fed. Cir. 1997). Such descriptive means cannot be found in the disclosure for the inventions of the base claim 3.

Claims 3-8 and 12-15 depend upon the claim 1 and are rejected due to their dependency on the claim 1.

Claim 2 is subject to the same rationale of rejection set forth in the claim 1.

The claims 9-11 depend upon the claim 2 and are rejected due to their dependency on the claim 2.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-2 and 3-11, 12-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

For example, the base claim 1 recites the two "resizing each full frame to produce a plurality of frames that are antialiased." Resizing each full frame (a single full frame) does not produce a plurality of frames, as opposed to resizing a plurality of the full frames to produce a plurality of frames that are antialiased.

Claims 3-8 and 12-15 depend upon the claim 1 and are rejected due to their dependency on the claim 1.

Claim 2 is subject to the same rationale of rejection set forth in the claim 1.

The claims 9-11 depend upon the claim 2 and are rejected due to their dependency on the claim 2.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 19 is rejected under 35 U.S.C. 102(b) as being anticipated by Demos U.S. Patent No. 5,852,565 (hereinafter Demos).

Claim 19:

Demos discloses a video conversion systems (See column 19, lines 25-52); the system comprising:

A computer terminal (*see column 19, lines 25-52 of the cited reference*) defining the number of pixels contained in each frame of full frames that are rendered at a whole number multiple of a digital video resolution value (*See Fig. 10 of the cited reference wherein a video of resolution 1k by 512 is converted to 2k by 1k*) and that are rendered at a whole number multiple of a temporal resolution value defining the rate of display of full frames (*See Fig. 10 of the cited reference wherein the frame rate 24 fps or 36 fps is converted to 72 fps/Hz; see column 15, lines 18-50 for detailed description*);

A computer screen attached to said terminal (*column 19, lines 25-51 and column 3, lines 5-60*).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 1, 4-7, 15, and 20-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Demos U.S. Patent No. 5,852,565 (hereinafter Demos-565) in view of Adobe Dynamic Media Group, "A Digital Video Primer", pp. 1-31; June 2000 as applied to claim 1 above, and further in view of Demos U.S. Patent No. 6,442,203 (hereinafter Demos-203).

Claim 1:

Demos-565 teaches rendering of full frames at a whole number of multiple of a digital video resolution value defining the number of pixels contained in each frame and at a whole number multiple of a temporal resolution value defining the rate of display of full frames on a computer screen (***Fig. 10 of the cited reference wherein a video of resolution 1k by 512 is converted to 2k by 1k. See Fig. 10 of the cited reference wherein the frame rate 24 fps or 36 fps is converted to 72 fps/Hz; see column 15, lines 18-50 for detailed description***).

Although Demos-565 is silent to the claim limitation of resizing each full frame to produce a plurality of frames that are antialiased, *Adobe-Dynamics-Media-Group in Page 7 also discloses* ***spatial compression*** *such as reducing the size of each video frame in which each input video frame is resized, in page 7 and 11, while keeping image quality high and avoiding compression artifacts. Adobe-Dynamics-Media-Group further discloses scaling each video frame to create* ***smooth key-framed animations of flying video*** *with controls for such*

parameters as rotation, ***scale and distortion****.* ***In regard to a spatial resizing, Applicant admits on page 4 of applicant's specification that Adobe's AfterEffects teaches bicubic interpolation of pixels for each full frame which is related to spatial resizing of a video frame and Adobe-Dynamics-Media-Group teaches a set of the software such as Adobe AfterEffects, Photoshop and Premier*** *and thereby teaches spatial resizing of a video frame to reduce the resolution of a video frame. Additionally, Adobe-Dynamics-Media-Group further discloses in Page 18 cross-platform compatibility in which digital clips can be imported or exported in many* ***different video formats*** *with different resolutions and rendering the text and graphics at any scale.*

Applicant admits on page 4 of applicant's specification that Adobe's AfterEffects teaches bicubic interpolation of pixels for each full frame and Adobe-Dynamics-Media-Group teaches a set of the software such as Adobe AfterEffects, Photoshop and Premier.

Although Demos-565 is silent to the claim limitation of blending each consecutive frame, Adobe-Dynamics-Media-Group teaches in page 12 blending each consecutive frame of a video stream in which the pixels corresponding to the frames can be spatially or temporally blended by temporal compression/combination of the inter temporal image frames and spatial compression/combination of the pixels associated with each consecutive image frame and blending with text and graphics for each consecutive image frame. Adobe-Dynamics-Media-Group discloses in page 12 each of I, B and P frames are obtained from a pair of consecutive frames by averaging the corresponding pixel values of each frame.

It would have been obvious to one of the ordinary skill in the art to have incorporated Adobe's resizing feature in a software program into Demos-565's computer program because Demos-565 in Fig. 8 a filter to reduce the resolution of the 2k by 1k original image to 1k by 512

base layer image. Demos-565 also teaches **temporal scaling and resolution scaling** techniques in column 17, lines 35-67 and column 18, lines 1-12 and column 18, lines 38-57) and therefore suggests an obvious modification.

One of the ordinary skill in the art would have been motivated to perform temporal scaling and resolution scaling according to Demos-565's invention (See Demos-565 column 17, lines 35-67 and column 18, lines 1-12 and column 18, lines 38-57).

Claim 4:

The claim 4 encompasses the same scope of invention as that of the claim 1 except additional claim limitation of separating each frame into a first and second field, the first field contains the even lines of a frame and the second field contains the odd lines of a frame. However, Adobe-Dynamics-Media-Group further discloses the claim limitation of separating each frame into a first and second field, the first field contains the even lines of a frame and the second field contains the odd lines of a frame (*e.g., Adobe-Dynamics-Media-Group further discloses software for calculating the images for the two set of fields, for each frame of video, in order to achieve the smoothest motion and thereby separating the even and odd lines of the picture image by calculating the images for the two set of fields separately for the first 1/60th of a second and the next 1/60th of a second in the TV screen. Therefore, a television that is displaying 30 frames per second is really displaying 60 fields per second*).

Claim 5:

The claim 5 encompasses the same scope of invention as that of the claim 1 except additional claim limitation of alternately displaying the first and second fields of each frame, the first field of each frame with the second field of each frame. However, Adobe-Dynamics-Media-Group further discloses the claim limitation of alternately displaying the first and second fields of each frame, the first field of each frame with the second field of each frame (*e.g., Adobe-Dynamics-Media-Group page 4 calculating the odd and even fields of a picture image and alternately display the two set of fields for the first 1/60th of a second and the next 1/60th of a second in the TV screen*).

Claim 6:

The claim 6 encompasses the same scope of invention as that of the claim 1 except additional claim limitation of resizing each full frame to produce antialiased frames is performed with bicubic interpolation.

However, Adobe-Dynamics-Media-Group further discloses the claim limitation of resizing each full frame to produce antialiased frames is performed with bicubic interpolation (***e.g., Applicant admits on page 4 of applicant's specification that Adobe's AfterEffects teaches bicubic interpolation of pixels for each full frame and Adobe-Dynamics-Media-Group teaches a set of the software such as Adobe AfterEffects, Photoshop and Premier***).

Claim 7:

The claim 7 encompasses the same scope of invention as that of the claim 1 except additional claim limitation of each pair of consecutive frames being blending by averaging corresponding pixel values of each frame.

However, Adobe-Dynamics-Media-Group further discloses the claim limitation of each pair of consecutive frames being blending by averaging corresponding pixel values of each frame (*e.g., Adobe-Dynamics-Media-Group further discloses in page 12 each of the I, B and P frames are obtained from a pair of consecutive frames by averaging the corresponding pixel values of each frame*).

Claim 15:

The claim 15 encompasses the same scope of invention as that of the claim 1 except additional claim limitation of the rendering step being implemented using commercial software.

However, Adobe-Dynamics-Media-Group further discloses the commercial software implementing the rendering step (***e.g., Adobe-Dynamics-Media-Group in page 16 discloses the Photoshop software that can be used to perform the rendering step. Adobe-Dynamics-Media-Group in page 4 discloses the separating of two set of fields of a picture image using AfterEffects software. Adobe-Dynamics-Media-Group in page 3 that film displayed at the rate of 24 frames per second***).

Claim 20:

The claim 20 encompasses the same scope of invention as that of the claim 1. The claim 19 is subject to the same rationale of rejection set forth in the claim 1.

Claim 21:

The claim 21 encompasses the same scope of invention as that of the claim 7. The claim 19 is subject to the same rationale of rejection set forth in the claim 7.

Claim 22:

The claim 22 encompasses the same scope of invention as that of the claim 4. The claim 19 is subject to the same rationale of rejection set forth in the claim 4.

Claim 23:

The claim 23 encompasses the same scope of invention as that of the claim 5. The claim 19 is subject to the same rationale of rejection set forth in the claim 5.

Claim 24:

The claim 24 encompasses the same scope of invention as that of the claim 5. The claim 19 is subject to the same rationale of rejection set forth in the claim 5.

Claim 25:

The claim 22 encompasses the same scope of invention as that of the claim 6. The claim 19 is subject to the same rationale of rejection set forth in the claim 6.

Claim 26:

The claim 22 encompasses the same scope of invention as that of the claim 7. The claim 19 is subject to the same rationale of rejection set forth in the claim 7.

Claims 2, 3, 8-14, and 27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Demos U.S. Patent No. 5,852,565 (hereinafter Demos-565) in view of Adobe Dynamic Media Group, "A Digital Video Primer", pp. 1-31; June 2000 as applied to claim 1 above, and further in view of (hereinafter Demos-203).

Claim 2:

Demos-565 and Adobe-Dynamics-Media-Group teach rendering of full frames at a whole number of multiple of a digital video resolution value defining the number of pixels contained in each frame and at a whole number multiple of a temporal resolution value defining the rate of display of full frames on a computer screen (*e.g., Adobe-Dynamics-Media-Group teaches in page 4 producing videos in different resolutions and at the frame rates. The original video frames can be rendered at different resolutions and different temporal resolution rates. For example, a television that is displaying 30 frames per second for a stream of video frames is really displaying 60 fields per second and therefore the stream is rendered at 60 frames per second while the same stream of video frames being displayed on the computer is displayed at 30 frames per second due to the separation of the odd/even fields and alternately displaying the odd frame and even frame on the computer screen . Adobe-Dynamics-Media-Group further discloses scaling each video frame to create smooth key-framed animations of flying video which includes controls for such parameters as rotation, scale and distortion. Adobe-Dynamics-Media-Group further discloses in Page 20 of a Timeline control for adjusting the frame rate which control how fast or slow a particular clip will play, i.e., changing the frame rate of a video clip. Therefore,*

Adobe-Dynamics-Media-Group teaches full frames are rendered at a multiple of the original video resolution and at a multiple of a temporal resolution rate).

Resizing a full frame to produce one of a plurality of frames that are antialiased (*e.g., Adobe-Dynamics-Media-Group discloses in Page 4 producing videos in different resolutions and at different frame rate. Adobe-Dynamics-Media-Group in Page 7 discloses temporal* ***compression*** *such as the inter-frame compression in which the whole video stream may be resized in terms of the data size, for example, the video is compressed to one-fifth of its original size (resizing). Adobe-Dynamics-Media-Group in Page 7 also discloses spatial compression such as reducing the size of each video frame in which each input video frame is resized, in page 7 and 11, while keeping image quality high and avoiding compression artifacts; Adobe-Dynamics-Media-Group further discloses scaling each video frame to create smooth key-framed animations of flying video which includes controls for such parameters as rotation, scale and distortion. Adobe-Dynamics-Media-Group further discloses in Page 20 of a Timeline control for adjusting the frame rate which control how fast or slow a particular clip will play, i.e., changing the frame rate of a video clip. Finally, in regard to a spatially resizing, Applicant admits on page 4 of applicant's specification that Adobe's AfterEffects teaches bicubic interpolation of pixels for each full frame which is related to spatially resizing of a video frame and Adobe-Dynamics-Media-Group teaches a set of the software such as Adobe AfterEffects, Photoshop and Premier and thereby teaches spatially resizing of a video frame to reduce the resolution of a video frame. Additionally, Adobe-Dynamics-Media-Group further discloses in Page 18 cross-platform compatibility in which digital clips can be imported or exported in many different video formats with different resolutions and rendering the text and graphics at any scale. e.g., Adobe-*

Dynamics-Media-Group teaches compression which reduces the size of each video frame, in page 7 and 11, while keeping image quality high and avoiding compression artifacts. Moreover, Adobe-Dynamics-Media-Group further discloses scaling each video frame to create smooth key-framed animations of flying video with controls for such parameters as rotation, scale and distortion. Adobe-Dynamics-Media-Group further discloses in Page 20 of a Timeline control for adjusting the frame rate which control how fast or slow a particular clip will play, i.e., changing the frame rate of a video clip);

Applicant admits on page 4 of applicant's specification that Adobe's AfterEffects teaches bicubic interpolation of pixels for each full frame and Adobe-Dynamics-Media-Group teaches a set of the software such as Adobe AfterEffects, Photoshop and Premier.

Blending each consecutive frame (*e.g., Adobe-Dynamics-Media-Group teaches in page 12 that pixels corresponding to the frames can be spatially or temporally blended. For example, temporal compression of a video streams requires blending between the image frames.*).

Separating each frame into a first and second field, wherein the first field contains the even lines of a frame and the second field contains the odd lines of a frame (*e.g., Adobe-Dynamics-Media-Group further discloses software for calculating the images for the two set of fields, for each frame of video, in order to achieve the smoothest motion and thereby separating the even and odd lines of the picture image by calculating the images for the two set of fields separately for the first 1/60th of the second and the next 1/60th of a second in the TV screen. Therefore, a television that is displaying 30 frames per second is really displaying 60 fields per second*); and

Alternately displaying the first and second fields of each frame, the first field of each frame with the second field of each frame (*e.g., Adobe-Dynamics-Media-Group page 4 calculating the odd and even fields of a picture image and alternately display the two set of fields for the first 1/60th of a second and the next 1/60th of a second in the TV screen*).

However, Demos-565 and Adobe-Dynamics-Media-Group are silent to Gaussian blurring and thereby is silent to the claim limitation of "Blending the colors and images depicted in pixels that are within a Gaussian blur radius value of a center pixel, wherein the number of pixels blended is proportional to a Gaussian blur radius".

(c) Demos-203 teaches Gaussian blur radius and the claim limitation of "Blending the colors and images depicted in pixels that are within a Gaussian blur radius value of a center pixel, wherein the number of pixels blended is proportional to a Gaussian blur radius" (*e.g., Demos column 22, lines 56-67; column 23, lines 1-25 a Gaussian blur filter with certain radius along the motion vector crossing the set of the frames wherein the a series of Gaussian filters are placed at single pixel steps along the motion vector line and the motion vector line extends plus and minus half its length centered about the new pixel position center. Therefore, Demos teaches the gaussian blurring radius within the Gaussian blur filter*).

(d) It would have been obvious to one of ordinary skill in the art to have incorporated the Gaussina blur radius of Demos-203 into Demos-565 and Adobe-Dynamics-Media-Group's software such as AfterEffects because Adobe-Dynamics-Media-Group discloses effects filters and motion blur through Motion Math (Adobe-Dynamics-Media-Group page 21 and 25) and Adobe AfterEffects has the bicubic interpolation filter and motion blur math for spatially or temporally blending of pixels according to the AfterEffects' filters (Adobe-Dynamics-Media-

Group page 21 and 25). Therefore Adobe-Dynamics-Media-Group suggests the claim limitation. Moreover, Demos also teaches spatially and temporally compositing of video frames (Demos column 19-22).

(e) One of the ordinary skill in the art would have been motivated to do this because Gaussian blur filter can be incorporated for spatially and temporally compositing of video frames (Demos-203 column 19-23) in Adobe's AfterEffects Software (Adobe-Dynamics-Media-Group page 21 and 25).

Claim 3:

The claim 3 encompasses the same scope of invention as that of the claim 2. The claim 2 is subject to the same rationale of rejection set forth in the claim 2.

Claim 8:

(a) The claim 8 encompasses the same scope of invention as that of the claim 1 except additional claim limitation of gaussian blurring of a non-zero pixel radius being performed that blends the colors and images depicted in pixels that are within a gaussian blur radius value of a center pixel.

(b) The Demos-565 and Adobe-Dynamics-Media-Group disclose all claim limitations set forth in the claim 1. However, Demos-565 and Adobe-Dynamics-Media-Group are silent to Gaussian blur radius and thereby is silent to the claim limitation of gaussian blurring of a non-zero pixel radius being performed that blends the colors and images depicted in pixels that are within a gaussian blur radius value of a center pixel.

(c) Demos-203 teaches Gaussian blur radius and the claim limitation of gaussian blurring of a non-zero pixel radius being performed that blends the colors and images depicted in pixels that are within a gaussian blur radius value of a center pixel (*e.g., Demos-203 column 22, lines 56-67; column 23, lines 1-25 a Gaussian blur filter with certain radius along the motion vector crossing the set of the frames wherein the a series of Gaussian filters are placed at single pixel steps along the motion vector line and the motion vector line extends plus and minus half its length centered about the new pixel position center. Therefore, Demos-203 teaches the gaussian blurring radius within the Gaussian blur filter*).

(d) It would have been obvious to one of ordinary skill in the art to have incorporated the Gaussina blur radius of Demos-203 into Demos-565 and Adobe-Dynamics-Media-Group's software such as AfterEffects because Adobe-Dynamics-Media-Group discloses effects filters and motion blur through Motion Math (Adobe-Dynamics-Media-Group page 21 and 25) and Adobe AfterEffects has the bicubic interpolation filter and motion blur math for spatially or temporally blending of pixels according to the AfterEffects' filters (Adobe-Dynamics-Media-Group page 21 and 25). Therefore Demos-565 and Adobe-Dynamics-Media-Group suggests the claim limitation. Moreover, Demos-203 also teaches spatially and temporally compositing of video frames (Demos-203 column 19-22).

(e) One of the ordinary skill in the art would have been motivated to do this because Gaussian blur filter can be incorporated for spatially and temporally compositing of video frames (Demos-203 column 19-23) in Adobe's AfterEffects Software (Adobe-Dynamics-Media-Group page 21 and 25).

Claim 9:

The claim 9 encompasses the same scope of invention as that of the claim 2 except additional claim limitation that is identical to the claim 6. The claim 9 is subject to the same rationale of rejection set forth in the claim 6.

Claim 10:

The claim 10 encompasses the same scope of invention as that of the claim 2 except additional claim limitation that is identical to the claim 7. The claim 10 is subject to the same rationale of rejection set forth in the claim 7.

Claims 11-14:

Each of the claims 11-14 encompasses the same scope of invention as that of the claim 2. The claims 11-14 are subject to the same rationale of rejection set forth in the claim 2 (*e.g., Demos-203 column 22, lines 56-67; column 23, lines 1-25 a Gaussian blur filter with certain radius along the motion vector crossing the set of the frames wherein the a series of Gaussian filters are placed at single pixel steps along the motion vector line and the motion vector line extends plus and minus half its length centered about the new pixel position center. Therefore, Demos teaches the gaussian blurring radius within the Gaussian blur filter).*

Claim 27:

(a) The claim 27 encompasses the same scope of invention as that of the claim 26 except additional claim limitation of gaussian blurring being performed that blends the colors and images depicted in pixels that are in proximity to one another in each frame.

(b) The Demos-565 and Adobe-Dynamics-Media-Group disclose all claim limitations set forth in the claim 1. However, Demos-565 and Adobe-Dynamics-Media-Group are silent to

gaussian blurring being performed that blends the colors and images depicted in pixels that are in proximity to one another in each frame.

(c) Demos-203 teaches Gaussian blur and the claim limitation of gaussian blurring being performed that blends the colors and images depicted in pixels that are in proximity to one another in each frame (*e.g., Demos column 22, lines 56-67; column 23, lines 1-25 a Gaussian blur filter with certain radius along the motion vector crossing the set of the frames wherein the a series of Gaussian filters are placed at single pixel steps along the motion vector line and the motion vector line extends plus and minus half its length centered about the new pixel position center. Therefore, Demos teaches the gaussian blurring radius within the Gaussian blur filter*).

(d) It would have been obvious to one of ordinary skill in the art to have incorporated the Gaussina blurring of Demos-203 into Demos-565 and Adobe-Dynamics-Media-Group's software such as AfterEffects because Adobe-Dynamics-Media-Group discloses effects filters and motion blur through Motion Math (Adobe-Dynamics-Media-Group page 21 and 25) and Adobe AfterEffects has the bicubic interpolation filter and motion blur math for spatially or temporally blending of pixels according to the AfterEffects' filters (Adobe-Dynamics-Media-Group page 21 and 25). Therefore Adobe-Dynamics-Media-Group suggests the claim limitation. Moreover, Demos also teaches spatially and temporally compositing of video frames (Demos column 19-22).

(e) One of the ordinary skill in the art would have been motivated to do this because Gaussian blur filter can be incorporated for spatially and temporally compositing of video frames (Demos column 19-23) in Adobe's AfterEffects Software (Adobe-Dynamics-Media-Group page 21 and 25).

Claims 28-29:

Each of the claims 28-29 encompasses the same scope of invention as that of the claim 2. The claims 28-29 are subject to the same rationale of rejection set forth in the claim 2 (*e.g., Demos-203 column 22, lines 56-67; column 23, lines 1-25 a Gaussian blur filter with certain radius along the motion vector crossing the set of the frames wherein the a series of Gaussian filters are placed at single pixel steps along the motion vector line and the motion vector line extends plus and minus half its length centered about the new pixel position center. Therefore, Demos teaches the gaussian blurring radius within the Gaussian blur filter).*

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jin-Cheng Wang whose telephone number is (571) 272-7665. The examiner can normally be reached on 8:00 - 6:30 (Mon-Thu).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kee Tung can be reached on (571) 272-7794. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

jcw

Kee M. Tung
Primary Examiner